What Is Claimed Is:

1. A DNA fragment encoding a homolog of atrazine chlorohydrolase and comprising the sequence of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NOS:7-11 and SEQ ID NOS:17-21.

2. A *s*-triazine-degrading protein having at least one amino acid different from the protein of SEQ ID NO:2, wherein the coding region of the nucleic acid encoding the *s*-triazine degrading protein has at least 95% homology to SEQ ID NO:1 and wherein the *s*-triazine-degrading protein has an altered catalytic activity, as compared with the protein having the sequence of SEQ ID NO:2.

3. The protein of Claim 2 wherein the protein is selected from the group consisting of SEQ ID NOS: 5, 6 and 22-26.

4. The protein of Claim 2 wherein the substrate for the *s*-triazine degrading protein is 2-chloro-4-(ethylamino)-6-(isopropylamino)-1,3,5-triazine.

5. The protein of Claim 2 wherein the substrate for the *s*-triazine degrading protein is 2-chloro-4-(ethylamino)-6-(tertiary butyl-amino)-1,3,5-triazine.

6. The protein of Claim 2 wherein the substrate for the *s*-triazine degrading protein is 2,4,6-triamino-*s*-triazine.

7. A protein selected from the group consisting of proteins comprising the amino acid sequences of SEQ ID NOS: 5, 6 and 22-26.

8. A remediation composition comprising a cell producing the protein of Claim 2.

9. The composition of Claim 8, wherein the composition is suitable for treating soil or water.

10. A remediation composition comprising the protein of Claim 2.

11. The composition of Claim 10 wherein the composition is suitable for treating soil or water.

12. The DNA fragment of Claim 1 in an expression vector.

13. The DNA fragment of Claim 12 in a cell.

14. The DNA fragment of Claim 13 wherein the cell is a bacterium.

15. The DNA fragment of Claim 14 wherein the cell is *E. coli*.

16. A DNA fragment having a portion of its nucleic acid sequence as having at least 95% homology to a DNA fragment consisting of position 236 and ending at position 1655 of SEQ ID NO:1, wherein the DNA fragment is capable of hybridizing under stringent conditions to SEQ ID NO:1 and wherein there is at least one amino acid change in the protein encoded by the DNA fragment as compared with SEQ ID NO:2 and wherein the protein encoded by the DNA fragment is capable of dechlorinating at least one *s*-triazine-containing compound and has an enzymatic activity different from the enzymatic activity of the protein corresponding to SEQ ID NO:2.

17. The fragment of Claim 16, wherein the *s*-triazine-containing compound is 2-chloro-4-(ethylamino)-6-(isopropylamino)-1,3,5-triazine.

18. The fragment of Claim 16, wherein the *s*-triazine-containing compound is 2-chloro-4-(ethylamino)-6-(tertiary butyl-amino)-1,3,5-triazine.

19. The fragment of Claim 16, wherein the *s*-triazine containing compound is (2,4,6-triamino-*s*-triazine).

20. The fragment of Claim 16 wherein the enzymatic activity is an improved ability to degrade atrazine.

21. The fragment of Claim 20 wherein the enzymatic activity is a 10-fold improvement in the ability to degrade atrazine.

22. The fragment of Claim 16, wherein the enzymatic activity is an altered substrate.

23. The protein of Claim 2 which is a homotetramer.

24. The protein of Claim 2 bound to an immobilization support.

25. A method for treating a sample comprising an *s*-triazine-containing compound comprising the step of:

adding a composition to a sample comprising an *s*-triazine-containing compound, wherein the composition comprises a protein encoded by a gene having at least a portion of the nucleic acid sequence of the gene having at least 95% homology to the sequence beginning at position 236 and ending at position 1655 of SEQ ID NO:1, wherein the gene is capable of hybridizing under stringent conditions to SEQ ID NO:1, wherein there is at least one amino acid change in the protein encoded by the DNA fragment as compared with SEQ ID NO:2 and wherein the protein has an altered catalytic acitivity as compared to the protein having the amino acid sequence of SEQ ID NO:2.

26. The method of Claim 25 wherein the composition comprises bacteria expressing the protein.

27. The method of Claim 25 wherein the *s*-triazine -containing compound is 2-chloro-4-(ethylamino)-6-(isopropylamino)-1,3,5-triazine.

28. The method of Claim 25 wherein the *s*-triazine-containing compound is 2-chloro-4-(ethylamino)-6-(tertiary butyl-amino)-1,3,5-triazine.

29. The method of Claim 25 wherein the *s*-triazine containing compound is (2,4,6-triamino-*s*-triazine).

30. The method of Claim 25 wherein the protein encoded by the gene is selected from the group consisting of SEQ ID NOS: 5, 6 and 22-26.

31. A method for obtaining homologs of an atrazine chlorohydrolase comprising the steps of:

obtaining a nucleic acid sequence encoding atrazine chlorohydrolase;

mutagenizing the nucleic acid to obtain a modified nucleic acid sequence that encodes for a protein having an amino acid sequence with at least one amino acid change relative to the amino acid sequence of the atrazine chlorohydrolase;

screening the proteins encoded by the modified nucleic acid sequence; and

selecting proteins with altered catalytic activity as compared to the catalytic activity of the atrazine chlorohydrolase.

32. The method of Claim 31 wherein the atrazine chlorohydrolase nucleic acid sequence is SEQ ID NO:1.

33. The method of Claim 31 wherein the altered catalytic activity is an improved ability to degrade atrazine.

34. The method of Claim 31 wherein the selected proteins have an altered substrate activity.